PATENT

Attorney Docket No.: LUC-013

Listing of Claims:

Please amend the claims as follows. This Listing of Claims will replace all prior versions and listings of claims in the application.

CLAIMS

- 1. -64. (Canceled).
- 65. (Currently Amended) The device method of claim 64 75, wherein the dopant is selected from the group consisting of diphenylacridine, coumarins, perylene, quinolates, porphyrins, porphines, and pyrazalones and their derivatives.
- 66. (Currently Amended) The device method of claim 64 75, further comprising wherein the electroluminescent device comprises a layer of a hole transmitting material between the first electrode and the layer of the electroluminescent composition, and also comprising a layer of an electron transmitting material between the second electrode and the layer of the electroluminescent composition.
- 67. (Currently Amended) The device method of claim 66, wherein the hole transmitting layer is an aromatic amine.
- 68. (Currently Amended) The device method of claim 47 $\underline{67}$, wherein the aromatic amine is N,N'-diphenyl-N,N'-bis (3-methylphenyl) -1,1' -biphenyl -4,4'-diamine (TPD) or α -NBP.

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69. (Currently Amended) The device method of claim 66, wherein the electron

transmitting material comprises a metal quinolate.

70. (Currently Amended) The device method of claim 66, wherein the electron

transmitting layer comprises lithium quinolate.

71. (Currently Amended) The device method of claim 66, wherein the electron

transmitting layer comprises aluminum quinolate.

72. (Currently Amended) The device method of claim 66, wherein the electron

transmitting layer comprises zirconium quinolate.

73. (Currently Amended) The device method of claim 64 75, wherein the first

electrode acts as an anode and is formed of a transparent electrically conducting material

selected from glass and plastic.

74. (Currently Amended) The device method of claim 73, wherein the second

electrode acts as a cathode and is formed of a material selected from aluminum, calcium,

lithium, magnesium, magnesium alloys and silver/magnesium alloys.

75. (New) A method for substantially increasing the luminescence efficiency

measurable as cd A⁻¹, substantially increasing luminance measurable as cd m⁻² at 20 mA cm⁻²,

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and substantially reducing the turn-on voltage relative to an aluminum quinolate-based device of an electroluminescent device comprising

- (i) a first electrode;
- (ii) a second electrode; and,
- (iii) between the first and second electrodes, a layer of an electroluminescent composition,

said method comprising the step of fabricating said layer of an electroluminescent composition from a material consisting essentially of a metal quinolate selected from zirconium quinolate and hafnium quinolate doped with 10⁻³ to 10 mole% of a fluorescent dopant.

- 76. (New) A method for substantially increasing the luminescence efficiency measurable as cd A⁻¹, substantially increasing luminance measurable as cd m⁻² at 20 mA cm⁻², and substantially reducing the turn-on voltage relative to an aluminum quinolate-based device of an electroluminescent device comprising
 - (i) a first electrode;
 - (ii) a second electrode; and,
- (iii) between the first and second electrodes, a layer of an electroluminescent composition,

said method comprising the step of fabricating said layer of an electroluminescent composition from a material consisting essentially of zirconium quinolate doped with 10^{-3} to 10 mole% of a fluorescent dopant.

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The method of claim 76, wherein the dopant is selected from the group 77. (New) consisting of diphenylacridine, coumarins, perylene, quinolates, porphyrins, porphines, and pyrazalones and their derivatives.

- 78. (New) The method of claim 76, further wherein the electroluminescent device comprises a layer of a hole transmitting material between the first electrode and the layer of the electroluminescent composition, and also comprising a layer of an electron transmitting material between the second electrode and the layer of the electroluminescent composition.
- The method of claim 78, wherein the hole transmitting layer is an 79. (New) aromatic amine.
- 80. (New) The method of claim 79, wherein the aromatic amine is N,N'-diphenyl-N,N'-bis (3-methylphenyl) -1,1' -biphenyl -4,4'-diamine (TPD) or α -NBP.
- 81. (New) The method of claim 78, wherein the electron transmitting material comprises a metal quinolate.
- The method of claim 78, wherein the electron transmitting layer 82. (New) comprises lithium quinolate.
- The method of claim 78, wherein the electron transmitting layer 83. (New) comprises aluminum quinolate.

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84. (New) The method of claim 78, wherein the electron transmitting layer comprises zirconium quinolate.

- 85. (New) The method of claim 76, wherein the first electrode acts as an anode and is formed of a transparent electrically conducting material selected from glass and plastic.
- 86. (New) The method of claim 85, wherein the second electrode acts as a cathode and is formed of a material selected from aluminum, calcium, lithium, magnesium, magnesium alloys and silver/magnesium alloys.